WHAT IS CLAIMED IS:

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 A resin composition containing an imidized polyimide precursor having a polymer structure unit represented by formula
 below:

wherein the chemical structure represented by A^1 includes an aromatic compound and the chemical structure represented by A^2 includes an alicyclic compound, and a photosensitizer, wherein the chemical structure represented by A^1 in formula (1) above is biphenyl represented by chemical formula (2) below:

and the chemical structure represented by A^2 in formula (1) above is an alicyclic compound selected from either one of cyclohexane represented by chemical formula (3) below:

or 4,4'-methylenebiscyclohexane represented by chemical formula
15 (4) below:

and wherein the polyimide precursor has an imidization degree of 7.5 % or more and 36 % or less as determined by equation (a) below:

Equation (a):
$$(PS_1/PS_2)/(PI_1/PI_2) \times 100$$

wherein PS_1 and PI_1 represent the absorbances derived from the imide ring and PS_2 and PI_2 represent the absorbances derived from chemical structure A^2 in formula (1) above, and PS_1 and PS_2 represent the absorbances of the polyimide precursor to be tested for the imidization degree and PI_1 and PI_2 represent the absorbances of the polyimide precursor after complete imidization.

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2. The resin composition of claim 1 wherein the photosensitizer is based on an o-quinone diazide compound represented by formula (5) below:

$$R^3$$
 Formula(5)
 R^4

wherein substituent R^3 represents any one of substituents selected from the group consisting of methyl, hydroxyl, methylketone, cyano and the substituents represented by chemical formulae (6) – (8) below, substituent R^4 represents any one of substituents selected from the group consisting of hydrogen and the substituents represented by chemical formulae (6) – (8) below, and substituent R^5 represents any

one of substituents selected from the group consisting of hydrogen and the substituents represented by chemical formulae (6) - (11) below, provided that at least one of substituents R^3 - R^5 represents any one of substituents selected from the group consisting of the substituents represented by chemical formulae (6)-(8) below:

$$0 \\ N_2 \\ 0 \\ S = 0$$

$$0$$
Chemical Formula (6)

$$0 \\ N_2 \\ \cdots \\ 0 \\ S = 0$$

$$0$$

$$0$$

$$0 = N_2$$

$$0 = S = 0$$

$$0$$

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$$0 \longrightarrow N_2 \longrightarrow N_2 \longrightarrow N_3 \longrightarrow$$

$$0 \\ N_2 \\ \cdots \\ 0 \\ N-H$$

$$0 \\ N-H$$

$$0 = 10 \quad \text{N}_2$$

$$0 = 10 \quad \text{Chemical formula (1.1)}$$

$$0 = 10 \quad \text{N-H}$$

3. The resin composition of claim 1 wherein the photosensitizer is based on an o-quinone diazide compound represented by formula (12) below:

$$R^{6} \xrightarrow{R^{7}} A^{3} \xrightarrow{R^{8}} R^{9}$$

$$R^{10} \times Formula (12)$$

wherein chemical structure A³ represents any one of chemical structures selected from the group consisting of oxygen, sulfonyl, ketone and the chemical structures represented by chemical formulae (13) and (14) below, and substituents R6-R¹¹ represent any one of substituents selected from the group consisting of hydrogen,

10 hydroxyl and the substituents represented by chemical formulae (6)-(11) below, provided that at least one of substituents R6-R¹¹ represents any one of substituents selected from the group consisting of the substituents represented by chemical formulae (6)-(8) below:

$$\begin{array}{c} \text{CH}_3 \\ -\text{C} - & \cdots \end{array} \text{Chemical formula (13)} \\ \text{CH}_3 \end{array}$$

$$\begin{array}{c} \mathsf{CF}_3 \\ \mathsf{I} \\ \mathsf{-C} \\ \mathsf{-C} \\ \mathsf{CF}_3 \end{array}$$

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$$0 = \begin{cases} 0 \\ N_2 \\ 0 = s = 0 \end{cases}$$
 Chemical formula (8)

$$0 \longrightarrow N_2 \longrightarrow N_2 \longrightarrow N_3 \longrightarrow$$

$$0 \\ N_2 \\ \cdots Chemical formula (10) \\ 0 = S = 0 \\ N - H$$

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4. The resin composition of claim 5 wherein the o-quinone diazide compound is 2,3,4-trihydroxybenzophenone o-naphthoquinone diazide sulfonic ester represented by chemical formula (15) below:

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5. A process for forming a resin film comprising the steps of coating an object on which a resin film is to be formed with a resin composition containing a polyimide precursor having a polymer structure unit represented by formula (1) below and having an imidization degree of 7.5 % or more and 36 % or less and a photosensitizer to form a resin film, exposing the resin film to light to form a latent image, developing the resin film and heating

the resin film to imidize the polyimide precursor,

wherein the chemical structure represented by A^1 is biphenyl represented by chemical formula (2) below:

and the chemical structure represented by A^2 is an alicyclic compound selected from either one of cyclohexane represented by chemical formula (3) below:

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or 4,4'-methylenebiscyclohexane represented by chemical formula (4) below:

$$\sim$$
 Chemical formula (4).

6. A process for preparing a resin composition comprising reacting 1,4-diaminocyclohexane represented by chemical formula (16) below:

$$H_2N$$
 ----- NH_2 ----- Chemical formula (16)

with an aromatic dianhydride in a solvent to form a salt, reacting a resin solution containing the salt at a temperature of 80 °C or more and 150 °C or less, then reacting the resin solution at a temperature of 160 °C or more and 250 °C or less to a desired imidization degree and further adding a photosensitizer to the resin solution to give a resin composition.

7. A process for preparing a resin composition comprising reacting 4,4'-methylenebis(cyclohexylamine) represented by chemical formula (17) below:

$$H_2N$$
 — CH_2 — NH_2 Chemical formula (17)

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with an aromatic dianhydride in a solvent to form a salt, reacting a resin solution containing the salt at a temperature of 80 °C or more and 150 °C or less, then reacting the resin solution at a temperature of 160 °C or more and 250 °C or less to a desired imidization degree and further adding a photosensitizer to the resin solution to give a resin composition.